



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/582,019

06/08/2006

Ilya Lvovich Shchukin

GAP-PT002

1808

3624 7590 04/08/2008

VOLPE AND KOENIG, P.C.
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

WHITE, DWAYNE J

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,019	Applicant(s) SHCHUKIN ET AL.	
	Examiner DWAYNE J. WHITE	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/8/06; 5/15/07; 10/12/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 and 6, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,234,921. Although the conflicting claims are not identical, they are not patentably distinct from each other. Although the conflicting claims are not identical, they are not patentable distinct from each other. Claim 1 of the patent "anticipates" application claim 1. Accordingly, application claim 1 is not patentable distinct from patent claim 1. Here patent claim 1 requires:

“A method for enhancing effectiveness of rotor blade of wind energy device, characterized in that a rotor blade is made in the form of a wing with a thick aerodynamic profile and a vortex system for control of the boundary layer is arranged on the rear part of the blade opposite the side facing the wind, this system consisting of longitudinal cavities with central bodies forming annular channels, and suction withdrawal of air is carried out from the cavities and central bodies through air vents into receivers, which are connected by air ducts to a low pressure receiver inside the blade, air from which due to centrifugal forces of a rotating blade and also because of the difference in pressure occurring at a blade shank and end of the blade because of the large sum velocity of the air at the end of the rotating blade, is sucked out to the end of the blade through an air duct, wherein plates limiting the air flow flowing off along the blade are mounted inside the cavity and on the outer surface of the blade”

While application claim 1 only requires:

“A method for increasing a blade performance, comprising the steps of producing a blade in the form of a wing, and on a side of the blade that is opposite to an incoming air flow, carrying out the boundary layer suction through a system of slotted holes, characterized by: providing said blade with a thick airfoil profile, the air suction being carried out through system of slotted holes

Art Unit: 3745

embodied along the blade and into cavities embodied under said holes along the latter and provided with a central longitudinal hollow body in each cavity, said body forming an annular channel in each cavity to generate a vortex-like flow by the incoming air flow in said channel; carrying out the air suction from the cavity and central bodies through branch channels; and discharging air from the branch channels outside of the blade, wherein the flowing-off of the air flow along the cavities and along the blade is limited within the cavities by mounting partitions and on an external surface of the blade--by mounting ribs.”

Thus it is apparent that the more specific patent claim 1 encompasses application claim 1. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claim 1 is anticipated by Patent claim 1 and since anticipation is the epitome of obviousness, then Application claim 1 is obvious over Patent claim 1.

Claim 5 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 7,234,921. Although the conflicting claims are not identical, they are not patentably distinct from each other. Although the conflicting claims are not identical, they are not patentably distinct from each other. Although the conflicting claims are not identical, they are not patentable distinct from each other. Claim 8 of the patent "anticipates" application claim 5. Accordingly, application claim 5 is not patentable distinct from patent claim 8. Here patent claim 8 requires:

“A method of enhancing the effectiveness of operation of a rotor blade of a wind energy device, characterized in that suction withdrawal of air to the end of a blade is carried out from centrifugal forces of a rotating blade, and also because of pressure difference occurring at the blade shank and end of the blade because of the high sum speed of air at the end of the rotating blade, wherein the rotor blade is made in the form of a wing with a thick aerodynamic profile and a vortex system for control of the boundary layer, consisting of longitudinal cavities, is arranged on the rear part of the blade from the side opposite the wind.”

While application claim 1 only requires:

“A method for increasing a blade performance, comprising the steps of producing a blade in the form of a wing, and on a side of the blade that is opposite to an incoming air flow, carrying out the boundary layer suction through a system of slotted holes, characterized by: providing said blade with a thick airfoil profile, the air suction being carried out through system of slotted holes embodied along the blade and into cavities embodied under said holes along the latter to generate a vortex-like flow by the incoming air flow in said cavities; carrying out the air suction from the cavities through branch channels; and discharging air from the branch channels outside of the blade, wherein the flowing-off of the air flow along the cavities and along the blade is limited within the cavities by mounting partitions and on an external surface of the blade--by mounting ribs..”

Thus it is apparent that the more specific patent claim 8 encompasses application claim 5. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without

first submitting an appropriate terminal disclaimer. Note that since Application claim 5 is anticipated by Patent claim 8 and since anticipation is the epitome of obviousness, then Application claim 5 is obvious over Patent claim 8.

CONCLUSION

Allowable Subject Matter

Claims 3, 4, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWAYNE J. WHITE whose telephone number is (571)272-4825. The examiner can normally be reached on 7:00 am to 3:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne J White/
Examiner, Art Unit 3745

DJW